

Congress of the United States
Washington, DC 20515

July 10, 2013

The Honorable Kerri-Ann Jones, Ph.D.
Assistant Secretary for Oceans and International Environmental and Scientific Affairs
U.S. Department of State
2201 C Street N.W.
Washington, D.C. 20520

Dear Assistant Secretary Jones,

President Obama recently laid out a comprehensive plan for how his Administration will cut carbon pollution and fight devastating climate change. In his speech, the President laid out a test for determining whether allowing the Keystone XL tar sands pipeline to be built would be in the national interest. He stated:

And our national interest will be served only if this project does not significantly exacerbate the problem of carbon pollution. The net effects of the pipeline's impact on our climate will be absolutely critical to determining whether this project is allowed to go forward.¹

We strongly agree with the President that Keystone XL must be evaluated in terms of its effect on climate change, and we commend him for his statement.

Now the Administration must develop the information necessary to make this determination, and it is essential that the analysis be thorough, unbiased, and comprehensive.

In March, the State Department issued a draft evaluation of the environmental impacts of TransCanada's revised Keystone XL tar sands pipeline proposal. Unfortunately, that analysis contained significant mistakes in its assessment of the likelihood that the Keystone XL tar sands pipeline would have adverse impacts on carbon pollution. We urge the State Department to do a better job in analyzing the effect that Keystone XL would have on the development of the Canadian tar sands and the additional carbon pollution that would result, as well as the effect that Keystone XL would have on the quantity of carbon pollution produced by the U.S. transportation sector. We believe such an analysis would show that the Keystone XL pipeline fails the test the President set forth and must be denied.

Producing petroleum products from the tar sands generates substantially more carbon pollution than conventional oil. If the tar sands industry succeeds in its current plans to vastly expand production, that will be a big step in the wrong direction on climate change. But the review treats the available alternatives as something over which we have no influence. If indeed as the President said carbon pollution is a great moral issue, then this is something that demands

¹ The White House, *Remarks by the President on Climate Change* (Jun. 25, 2013) (online at www.whitehouse.gov/the-press-office/2013/06/25/remarks-president-climate-change).

our active involvement. We have the capability, and perhaps even the duty, to intensify our diplomatic engagement with Canada on the development of the tar sands, their role in climate change, and how both countries will pursue the large carbon pollution reductions that will be necessary to avoid catastrophic climate change.

We are not just bystanders evaluating likelihoods over which we have no influence. And we should not be investing in infrastructure and locking in higher emissions for decades to come, which will make it significantly more difficult to avoid catastrophic climate change.

I. Keystone XL Will Drive Tar Sands Development and Increased Greenhouse Gas Emissions

The State Department released the Draft Supplemental Environmental Impact Statement (draft SEIS) for the Keystone XL pipeline northern route on March 1, 2013.² The draft SEIS acknowledges that the Canadian tar sands bitumen transported by the Keystone XL pipeline has higher carbon emissions on a lifecycle basis compared to conventional oil.³ The draft SEIS estimates that the carbon emissions are 17% higher compared to the average crude refined in the United States in 2005.⁴ It also acknowledges that the carbon emissions would actually be up to 30% higher (i.e., 22% higher than the average crude) if the estimate accounted for the full range of products produced from a barrel of tar sands crude.⁵ Accordingly, the draft SEIS recognizes that if Keystone XL were to induce growth in the rate of tar sands extraction, it could cause additional greenhouse gas (GHG) emissions.⁶ However, the draft SEIS concludes that approval or denial of the project is “unlikely to have a substantial impact on the rate of development in the oil sands.”⁷

² U.S. Department of State, *Draft Supplemental Environmental Impact Statement for the Keystone XL Project* (Mar. 1, 2013) (online at <http://keystonepipeline-xl.state.gov/draftseis/index.htm>) (*hereinafter draft SEIS*).

³ *Id.* at ES-15.

⁴ *Id.*

⁵ U.S. Department of State, *Draft SEIS*, at 4.15-106; Letter from Cynthia Giles, Assistant Administrator for Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, to Jose W. Fernandez, Assistant Secretary, Economic, Energy and Business Affairs, U.S. Department of State and Kerri-Ann Jones, Assistant Secretary, Oceans and International Environmental and Scientific Affairs, U.S. Department of State, at 2 (Apr. 22, 2013) (online at www.epa.gov/compliance/nepa/keystone-xl-project-epa-comment-letter-20130056.pdf) (*hereinafter* U.S. Environmental Protection Agency, *Comments on Draft SEIS*).

⁶ U.S. Department of State, *Draft SEIS* at ES-15.

⁷ *Id.*

The draft SEIS relies on a new market analysis to support this conclusion. This market analysis finds that if the Keystone XL pipeline is denied and alternative pipelines are also blocked, tar sands crude could still reach the Gulf Coast through a massive expansion of rail transport at relatively little additional cost. The analysis also finds that those small additional costs would not be sufficient to make most new tar sands projects unprofitable under most of the scenarios analyzed.⁸ In essence, the State Department concludes that the tar sands will be developed at almost the same rate with or without Keystone XL, as the State Department believes that the market will demand and supply almost the same amount of tar sands oil with or without the pipeline.

We believe the State Department's conclusion that the project is unlikely to affect tar sands expansion is contrary to basic economics, the best evidence, and widely held expert opinion among financial analysts, the oil industry, and Canadian government officials. In our view, these defects make the market analysis underlying the State Department's conclusion fundamentally flawed.

A. *Pace of Tar Sands Development Is Not Pre-Determined*

Basic economics informs us that there is nothing inevitable about the projected rate of expansion of the tar sands. The actual timing and size of new tar sands projects will be decided by oil production companies and investors. New tar sands projects must compete for capital with projects to produce oil from other sources. It is not enough that a new tar sands project could be profitable; it must be more profitable than the alternatives to go forward. All else being equal, producers and investors will focus on resources with the highest rates of return.⁹

The reality on the ground is that new tar sands projects face a challenging financial environment.¹⁰ Production costs in the tar sands are high compared to many other sources of oil, which makes new tar sands projects sensitive to changes in production costs and the price of

⁸ *Id.* at ES-15, 1.4-1 to 1.4-71, 2.2-9 to 2.2-18. *See also, id.* at 2.2-27 (draft SEIS eliminates from detailed analysis the options of moving additional volumes of tar sands crude west through British Columbia (beyond the current Kinder Morgan expansion) through either additional expansions or the proposed Enbridge Northern Gateway Pipeline, given the uncertainty regarding such projects due to substantial opposition).

⁹ Here references to cost include, of course, risk premiums and other measures to address uncertainty.

¹⁰ *See, e.g.,* Mark Corey, Natural Resources Canada, *Memorandum to the Deputy Minister; Trends Impacting Investment in Canada's Oil Sands* (Apr. 10, 2012) (online at <http://s3.documentcloud.org/documents/498119/trends-impacting-investment-in-canadas-oil-sands.pdf>); *Greg Weston: Oilsands crippled by soaring costs, memo says*, CBC News (Nov. 1, 2012) (online at www.cbc.ca/news/politics/story/2012/11/01/pol-weston-oilsands-warnings-financial.html).

oil.¹¹ As the State Department acknowledges, transportation constraints are already “substantially impacting the prices” of tar sands oil.¹² According to the draft SEIS, tar sands oil traded at a \$30 to \$40 discount from Brent crude for most of 2012, rising to a \$50 to \$60 discount more recently.¹³ The State Department projects that capacity for moving tar sands out of Canada is likely to be full by 2016 or earlier, and some experts project that capacity will be effectively full by 2014.¹⁴ In addition, the booming U.S. shale oil sector is now competing with the tar sands for capital, labor, transport, and refining capacity.¹⁵

The tar sands industry plans to triple production by 2030, from 1.7 mmbpd (million barrels per day) in 2011 to 6.2 mmbpd.¹⁶ There appears to be no dispute that achieving these levels would require a substantial expansion in transport capacity, nor that without such a substantial transport expansion, tar sands production will be constrained, probably in the next few years. A number of analysts say the price discount caused by transport constraints is already slowing the rate of expansion of tar sands production.¹⁷ There is also broad agreement that

¹¹ See *id.*, U.S. Department of State, *Draft SEIS*, at 1.4-52 (discussing breakeven costs for new tar sands projects).

¹² U.S. Department of State, *Draft SEIS*, at 1.4-26.

¹³ *Id.* According to CIBC, pricing differentials between tar sands crude and Brent crude due to transportation constraints have also driven down stock prices for tar sands producers. Canadian Imperial Bank of Commerce, *A Look to the Future – 2013; Oil: Uncertainty Reigns . . . Again* (Dec. 2012) (online at http://files.newswire.ca/256/Oil_-_Uncertainty_Reigns_Again.pdf).

¹⁴ *Id.*; *Pipeline bottlenecks will continue to discount price for Canadian crude: CIBC*, Newswire (Dec. 17, 2012) (online at www.newswire.ca/en/story/1090187/pipeline-bottlenecks-will-continue-to-discount-price-for-canadian-crude-cibc).

¹⁵ See, e.g., *Faster and cheaper is watchword for Canada's oil sands*, Financial Times (May 27, 2013) (online at www.ft.com/cms/s/0/771d7062-bef0-11e2-87ff-00144feab7de.html#axzz2UmXtgyT) (“oil sands are facing intense competition from the US shale oil and gas boom which is forcing companies to keep tight controls on costs.”); *Analysis: U.S. shale boom forces change in Canadian oil patch*, Reuters (Feb. 25, 2013) (online at <http://ca.reuters.com/article/businessNews/idCABRE91O1B620130225?sp=true>) (“The dilemma over upgrading points to more problems ahead as oil sands producers compete for capital against the developers of the cheaper, less damaging shale oil.”); TD Economics, *Special Report: Pipeline expansion is a national priority* (Dec. 17, 2012) (online at www.td.com/document/PDF/economics/special/ca1212_pipeline.pdf) (“Current oil production in Western Canada coupled with the significant gains in US domestic production have led the industry to bump against capacity constraints in existing pipelines and refineries.”).

¹⁶ U.S. Department of State, *Draft SEIS*, at 1.4-26 (citing projections from the Canadian Association of Petroleum Producers).

¹⁷ See *Faster and cheaper is watchword for Canada's oil sands*, Financial Times (May 27, 2013) (online at www.ft.com/cms/s/0/771d7062-bef0-11e2-87ff-00144feab7de.html#axzz2UmXtgyT).

Keystone XL is the largest and most likely proposal currently under consideration to address those transport constraints, and that it would provide transport at a lower cost than the alternatives.¹⁸

B. *Analysis Downplays Impacts of Keystone XL on Tar Sands Development*

Despite the clear necessity for additional transport to enable tar sands expansion, the State Department's analysis downplays the effect of Keystone XL in relieving existing transportation constraints. The draft SEIS considers the prospects for alternatives to Keystone XL both likely and viable. Other evidence suggests that there are substantial issues with the alternatives, including cost and timing.

i. *Prospects for Other Pipelines Are Highly Uncertain*

In previous versions of the environmental analysis for the Keystone XL pipeline, the State Department reached basically the same conclusion that Keystone XL is unlikely to affect tar sands expansion, but it primarily relied on the argument that if Keystone was not built, other pipelines would be built to carry the tar sands to ports in British Columbia.¹⁹ In particular, the State Department highlighted the 525,000 barrels per day Enbridge Northern Gateway proposal, which is the next largest proposal after Keystone, and the 450,000 barrels per day expansion of the Kinder Morgan TransMountain Pipeline.²⁰

Today, the prospects for those pipelines are viewed as increasingly speculative. At the end of 2012, the Canadian Imperial Bank of Commerce (CIBC) stated that Northern Gateway and the TransMountain Pipeline expansion "face ever-increasing political risk; we assign no

¹⁸ See Enbridge, Northern Gateway Pipelines, *Project Details* (online at www.northerngateway.ca/project-details/) (Northern Gateway would transport 525,000 barrels of oil per day versus up to 830,000 on Keystone XL); Canadian Energy Research Institute, *Pacific Access: Part I – Linking Oil Sands Supply to New and Existing Markets*, at 28 (July 2012) (online at www.ceri.ca/images/stories/part_i_-_impacts_of_oil_sands_production_-_final_july_2012.pdf) ("KXL is likely, therefore to be moving Canadian bitumen before any of the other major pipeline projects considered in this report.").

¹⁹ See, e.g., U.S. Department of State, *Supplemental Draft Environmental Impact Statement for the Keystone XL Project*, 4-11 – 4-13, 4-20 (Apr. 22, 2011) ("EnSys (2010) determined that [without Keystone XL], the production of crude oil from the Canadian oil sands projects would not be affected and that production would continue at current or higher levels through 2030 unless no other pipeline system or other projects were implemented to transport crude oil from the oil sands projects, an outcome that EnSys considered unlikely."); U.S. Department of State, *Final Environmental Impact Statement for the Keystone XL Project*, 4-1 - 4-37 (Aug. 26, 2011) (online at http://keystonepipeline-xl.state.gov/archive/dos_docs/feis/index.htm). The State Department also pointed to the possibility of transport by rail or barge in these documents, but provided no detailed analysis of those options.

²⁰ U.S. Department of State, *Supplemental Draft Environmental Impact Statement for the Keystone XL Project*, at 4-12 – 4-13 (Apr. 22, 2011).

better than 50/50 odds that these pipes are built before the end of the decade.”²¹ Similarly, Goldman Sachs says in a recent analysis “[w]e see risk of delays to all the major pipeline projects being planned to move Canadian heavy oil out of Alberta.”²² Thus, in the most recent draft SEIS, the State Department evaluates a scenario in which these pipelines are not built and in which all of the tar sands crude is transported by rail.²³

Since the draft SEIS was published, prospects for Northern Gateway have dimmed even further. On May 31, 2013, the Province of British Columbia filed its 99-page formal opposition to approval of Northern Gateway with the Joint Review Panel, the entity charged with reviewing the project for the Canadian government.²⁴ Also, a recent poll found that Canadians’ support for building pipelines to the West is falling, with only 45% supporting such pipelines nationally.²⁵ A solid majority (60%) of residents of British Columbia oppose new pipelines, and roughly two-thirds (65%) oppose additional oil tankers off the British Columbia coast, which would be necessary to transport the oil from any new pipeline. The diminishing prospects for these pipelines underscores the risk of picking what appears to be the most likely scenario and dismissing others as “unlikely.”

ii. Alternative Scenario Analysis Is Flawed and Uncertain

The State Department relies on an analysis of specific scenarios to conclude that the tar sands bitumen could get to market even without Keystone XL, but it fails to properly account for the very substantial uncertainty that is inherent in its projections by assessing a full range of scenarios. The State Department selects certain scenarios that it considers the most likely, and fails to evaluate other quite possible scenarios. In particular, it has no “plausible worst case” scenario that assesses the potential climate impacts of Keystone XL under a set of reasonable assumptions that would tend to produce a greater impact.

²¹ Canadian Imperial Bank of Commerce, *A Look to the Future – 2013; Oil: Uncertainty Reigns . . . Again*, at 2 (Dec. 2012) (online at http://files.newswire.ca/256/Oil_-_Uncertainty_Reigns_Again.pdf).

²² Goldman Sachs, *Getting oil out of Canada: Heavy oil diffs expected to stay wide and volatile*, at 16 (June 2, 2013).

²³ U.S. Department of State, *Draft SEIS*, at 1.4-26 – 1.4-27 (“The assessment of [oil sands crude] transportation possibilities in the following section assumes that no new United States-Canada cross-border, or other [oil sands crude] export, pipeline capacity is added between now and 2035.”).

²⁴ Joint Review Panel for the Enbridge Northern Gateway Project, *Argument of the Province of British Columbia* (May 31, 2013) (online at www.env.gov.bc.ca/main/docs/2013/BC-Submission-to-NGP-JointReviewPanel_130531.pdf).

²⁵ *Fewer Canadians back plans for new oil pipelines to West Coast ports: poll*, The Globe and Mail (May 30, 2013) (online at www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/fewer-canadians-back-plans-for-new-oil-pipelines-to-west-coast-ports-poll/article12245904/).

While there are hypothetical scenarios in which Keystone XL would not have a substantial effect on the rate of development of the tar sands, there are also highly plausible scenarios in which the pipeline would have such an effect. Keystone XL could have a much more significant effect on tar sands expansion than the draft SEIS projects if any one of a number of key variables differ from the State Department's assumptions. Among others, these variables include: higher rail costs than projected; higher costs for new tar sands projects than assumed; competition from shale and other tight oil plays making new tar sands projects relatively less attractive investments; and future carbon pollution pricing policies that force the tar sands to internalize their pollution costs.

In these comments, we focus on flaws in the State Department's analysis of the prospects for transporting tar sands by rail, but the potential effects of each of the variables above should be fully evaluated in the final SEIS.

iii. Rail Analysis is Flawed

The State Department builds its primary scenarios based on an analysis of the prospects for transporting tar sands by rail that appears to have several significant flaws. A recent Reuters report detailed a number of problems with the analysis.²⁶ These include cost projections dramatically lower than current costs, misinterpretation of analyses, and an inapplicable analogy between Bakken production and tar sands.

For example, the State Department assumed that rail shipment would cost about \$15 per barrel, but current costs are closer to \$30 per barrel.²⁷ It is plausible that those costs could come down with more investment in "unit trains," but increasing competition and congestion with U.S. shale oil development in the Bakken could also raise costs. The State Department cited two analyses that projected 200,000 or 250,000 barrels of tar sands would be moved by rail to the Gulf by the end of this year. But according to the Reuters analysis, the State Department misinterpreted one of those analyses, and the other one is being reevaluated in light of the fact that the numbers are nowhere near that high now, halfway through the year.²⁸ Goldman Sachs estimates that no more than 30,000 to 60,000 barrels of tar sands and other Canadian heavy crude, combined, will move by rail to the United States this year.²⁹

The State Department also points to the fact that rail shipments of U.S. light sweet crude production from the Bakken are booming and projected to keep growing, which the State

²⁶ *Analysis: Oil-by-train may not be substitute for Keystone pipeline*, Reuters (Apr. 18, 2013).

²⁷ *Id.*

²⁸ *Id.*

²⁹ Goldman Sachs, *Getting oil out of Canada: Heavy oil diffs expected to stay wide and volatile*, at 15 (June 2, 2013).

Department suggests indicates that rail transport of tar sands could grow at a comparable pace.³⁰ But the very significant differences between using rail for the Bakken production and for tar sands undercut the applicability of this comparison. The Bakken oil is 900 miles closer, is lighter, allowing more to be carried per rail car, does not require special equipment such as heated cars and loading facilities, commands higher prices, and can pay a premium for the flexibility provided by rail.³¹

Canada's Minister of Natural Resources, Joe Oliver, recently dismissed the suggestion that rail is a good substitute for Keystone XL, saying "I don't think anybody feels that it could be a substitute for pipelines."³² Mr. Oliver cited to both cost and logistical challenges, noting that crude-by-rail "is more expensive for longer hauls than pipelines."³³ Further, he said, "[i]t is a good supplement but not the longer-term solution. ... I don't think anybody would suggest it is."³⁴ Goldman Sachs agrees, stating in a recent analysis, "[w]e expect rail to play an increasingly important role in accessing US markets; however, given the long distances and higher cost of rail, we believe pipeline capacity growth is critical in Canada and the key to sustainably removing congestion in the system."³⁵

In fact, the State Department's conclusion that rail could effectively substitute for Keystone XL and other pipelines with almost no effect on production was directly refuted by Mr. Oliver. According to Reuters, when asked if a rail-only scenario would put a dent in oil sands production, he said "Yes, I would say it would."³⁶

The International Energy Agency (IEA) agrees, stating in a recent report, "Higher-cost rail transport is an alternative option, but would likely eat into producer margins, and thus might slow projects."³⁷ After discussing the boom in moving Bakken oil by rail, IEA discussed the

³⁰ U.S. Department of State, *Draft SEIS*, at 1.4-45.

³¹ See *Analysis: Oil-by-train may not be substitute for Keystone pipeline*, Reuters (Apr. 18, 2013); International Energy Agency, *Oil: Medium-Term Market Report 2013*, at 132 (May 2013).

³² *Crude-by-rail no substitute for Keystone XL -energy minister*, Reuters (Apr. 24, 2013) (online at www.reuters.com/article/2013/04/24/usa-keystone-rail-idUSL2N0DB23P20130424).

³³ *Id.*

³⁴ *Id.*

³⁵ Goldman Sachs, *Getting oil out of Canada: Heavy oil diffs expected to stay wide and volatile*, at 3 (June 2, 2013).

³⁶ *Crude-by-rail no substitute for Keystone XL -energy minister*, Reuters (Apr. 24, 2013) (online at www.reuters.com/article/2013/04/24/usa-keystone-rail-idUSL2N0DB23P20130424).

³⁷ International Energy Agency, *Oil: Medium-Term Market Report 2013*, at 45 (May 2013); IEA: *Crude-by-Rail from Canada No Substitute for Keystone XL*, Wall Street Journal (May 14, 2013).

prospects for using rail to transport tar sands product: “We do not, however, expect rail boom on a similar scale than in [the] case of US [light tight oil] as most Alberta crude production is in the form of bitumen.”³⁸

iv. Estimates of Production Changes Are Based on Highly Uncertain and Unrealistically Limited Scenarios

The draft SEIS provides a numeric estimate of how much future tar sands production could be restricted if Keystone XL is not built. Under a scenario where all pipeline development is constrained, the draft SEIS concludes that tar sands production could decrease by approximately 1% to 3% by 2020 and 2% to 4% by 2030.³⁹ Due to the substantial uncertainty embedded in this analysis, these numbers appear more likely to be misleading than informative.

For example, these estimates rest on the assumption that the incremental additional cost of transporting tar sands crude by rail rather than pipeline is \$5 per barrel.⁴⁰ As noted above, the draft SEIS estimates of the cost and viability of rail transport are questionable at best. When these questionable estimates are then used to estimate incremental cost differentials between transport by rail and pipeline, the potential for error is magnified.

The draft SEIS explains that \$5 is in the middle of an estimated range of \$2 per barrel to \$7.50 per barrel of additional cost for rail transport. The draft SEIS further supports the selection of \$5 per barrel on the grounds that “larger producers... would get better prices than the most expensive rail estimates” and there might be opportunities for cost savings through shipping different mixes of bitumen.⁴¹

There are multiple problems with this estimate. For example, the \$2 estimate is extrapolated from a highly unrealistic scenario in which shippers on pipelines do not enter into long-term contracts and instead pay higher short-term prices that are much closer to rail prices. The draft SEIS suggests that the differential between short-term (or uncommitted) prices on pipelines versus rail might be comparable to the differential between the prices under long-term contracts on pipelines versus rail, but the draft SEIS provides no evidence to support this suggestion. Thus, it is unclear whether \$2 is an appropriate value for the low end of the range. The draft SEIS provides another scenario in which the cost premium for rail transport could be

³⁸ International Energy Agency, *Oil: Medium-Term Market Report 2013*, at 131 (May 2013). See also RBC Capital Markets, *Energy Insights: Keystone XL – Weighing the Outcomes*, at 5 (Feb. 11, 2013) (“replacing 830,000 bbl/d of capacity with rail in the 2015 timeframe is unlikely”).

³⁹ U.S. Department of State, *Draft SEIS* at 1.4-56.

⁴⁰ *Id.* at 1.4-51.

⁴¹ *Id.*

up to \$9.39 per barrel, which casts doubt on \$7.50 as the upper end of the range.⁴² Finally, the draft SEIS provides no justification for assuming that \$5 per barrel represents the statistical central value of the range—in other words, there is no showing that \$5 is more likely to be the correct value than \$2 or \$7.50.

The selection of \$5 per barrel as the estimate of incremental rail costs is significant because this value is then applied to estimate numeric values for the percentage change in tar sands production in the absence of additional pipelines. The draft SEIS uses estimates of tar sands production levels under different oil prices to calculate how the assumed \$5 per barrel change in transport costs would affect production.⁴³ This is essentially a static, one-time snapshot based on a single set of assumptions, at least one of which is known to be flawed. The estimate purports to show the effect of Keystone XL on production across 15 years.

Given the large number of variables that affect production and the substantial uncertainty in the future values of those variables, a sophisticated modeling analysis would be required to actually produce a credible estimate. Thus, we have no confidence that the State Department's estimates of a 2% to 4% change in production are accurate or even plausible, and they most certainly do not represent a reasonable worst case analysis.

Other analyses focus on the near-term impacts on tar sands production of not building Keystone XL, and they find the potential for more significant impacts. One financial sector analysis projected that in the absence of Keystone XL, up to one-third of projected oil sands growth could be deferred in the 2015-17 timeframe, and the lower levels of production would persist beyond 2020.⁴⁴ A recent Goldman Sachs analysis stated: "In the event [oil sands crude] prices come under pressure, ... we would expect [new oil sands] project delays/deferrals in the out years [2015-2017]."⁴⁵ The State Department's failure to analyze realistic worst case scenarios produces a biased and unrealistic assessment.

In formal comments on the draft SEIS in April, the Environmental Protection Agency (EPA) expressed similar concerns about the State Department's analysis and conclusions about the potential effects of Keystone XL on greenhouse gas emissions and climate change.⁴⁶ EPA noted that over a 50-year lifespan, the incremental carbon pollution from the tar sands crude

⁴² U.S. Department of State, *Draft SEIS* at Table 2.2-7.

⁴³ *Id.* at 1.4-56.

⁴⁴ See, e.g., RBC Capital Markets, *Energy Insights: Keystone XL – Weighing the Outcomes*, at 3, 7 (Feb. 11, 2013).

⁴⁵ Goldman Sachs, *Getting oil out of Canada: Heavy oil diffs expected to stay wide and volatile*, at 7 (June 2, 2013).

⁴⁶ See U.S. Environmental Protection Agency, *Comments on Draft SEIS*, at 2.

transported by Keystone XL could total 935 million metric tons or more.⁴⁷ Based on the State Department's assumptions, the incremental carbon pollution from Keystone XL would be equivalent to the emissions of five or more additional coal plants.⁴⁸

EPA notes that "the market analysis and the conclusion that oil sands crude will find a way to market with or without the [Keystone XL] Project is the central finding that supports the DSEIS's conclusions regarding the Project's potential GHG emissions impacts."⁴⁹ EPA states:

Because the market analysis is so central to this key conclusion, we think it is important that it be as complete and accurate as possible. We note that the discussion in the DSEIS regarding energy markets, while informative, is not based on an updated energy-economic modeling effort. ... [W]e recommend that the Final EIS provide a more careful review of the market analysis and rail transport options. This analysis should include further investigation of rail capacity and costs, recognizing the potential for much higher per barrel rail shipment costs than presented in the DSEIS. This analysis should consider how the level and pace of oil sands crude production might be affected by higher transportation costs and the potential for congestion impacts to slow rail transport of crude.⁵⁰

It is also important to note that the controversy over Keystone XL is occurring in the context of a broader dispute over expanded tar sands development. If Keystone XL is approved, it will be viewed as a signal to oil companies and investors that concerns about the climate change consequences will not be allowed to slow expansion plans for the tar sands -- the message will be "Full Speed Ahead." If the serious climate effects of Keystone XL are acknowledged, taken into account in the decision-making process, and result in a rejection of the pipeline, it will send a very different signal to the oil industry. It would make it clear that they can no longer develop energy resources without regard to the climate consequences. In this respect, the effect of the Keystone XL decision on tar sands development is likely to be even more significant than relieving transportation constraints for the quantity of tar sands crude that would be moved through the pipeline.

C. *Conclusions Conflict with Expert Opinion*

Perhaps most troubling, the State Department's conclusions appear completely disconnected from a vast array of expert opinion, which views Keystone XL as critical to

⁴⁷ *Id.*

⁴⁸ See U.S. Environmental Protection Agency, *Greenhouse Gas Equivalencies Calculator* (online at www.epa.gov/cleanenergy/energy-resources/calculator.html#results).

⁴⁹ U.S. Environmental Protection Agency, *Comments on Draft SEIS*, at 3.

⁵⁰ *Id.*

realizing the tar sands industry's plans for expansion. The following statements provide a very different view from that presented in the draft SEIS:

"If there was something that kept me up at night, it would be the fear that before too long we're going to be landlocked in bitumen." Ron Liepert, former Alberta Energy Minister⁵¹

"[U]nless key transportation . . . challenges are overcome, that new oil will have nowhere to go." Deloitte⁵²

"Pipeline capacity out of Western Canada is adequate for the short term, but substantial progress must be made on this front in 2013. Progress, or lack thereof, will have a big impact on sentiment towards Canadian oil producers. We estimate that pipeline capacity out of the Western Canadian Sedimentary Basin could effectively be full in the 2014 time frame." Andrew Potter, oil and gas equity analyst, CIBC⁵³

"When I look at the oil sands, I still consider it a solid long-term investment because there is no exploration risk. But the X Factor is if the oil sands get access to the global markets." Reynold Tetzlaff, National Energy Leader, PricewaterhouseCoopers⁵⁴

"In the event that either the Keystone XL newbuild or Alberta Clipper expansion (or both) encounter further delays, we believe risk would grow that Canadian heavy oil/oil sands supply would remain trapped in the province of Alberta, putting downward pressure on [oil sands crude] pricing on both an absolute basis and versus [West Texas Intermediate]. . . . [R]ealization of potential supply growth is contingent on adequate infrastructure being developed in order to ensure Canadian oil supplies make it to key refining demand centers. . . . The key issue facing the Canadian oil industry, in our view,

⁵¹ *Without Keystone XL, oil sands face choke point*, The Globe and Mail (June 08, 2011) (online at www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/without-keystone-xl-oil-sands-face-choke-point/article598717/).

⁵² Deloitte, *Gaining ground in the sands 2013*, at 3 (online at www.deloitte.com/assets/Dcom-Canada/Local%20Assets/Documents/EandR/ca_en_energy_oil_sands_2013_110612.pdf).

⁵³ *Pipeline bottlenecks will continue to discount price for Canadian crude: CIBC*, Newswire (Dec. 17, 2012) (online at www.newswire.ca/en/story/1090187/pipeline-bottlenecks-will-continue-to-discount-price-for-canadian-crude-cibc); Canadian Imperial Bank of Commerce, *A Look to the Future – 2013; Oil: Uncertainty Reigns . . . Again* (Dec. 2012) (online at http://files.newswire.ca/256/Oil_-_Uncertainty_Reigns_Again.pdf).

⁵⁴ *The biggest threat to the oil sands might be cheaper sources of oil*, Alberta Oil (May 15, 2013) (online at www.albertaoilmagazine.com/2013/05/cheap-oil-threat-to-oil-sands/).

is ensuring adequate export infrastructure to reach major refining demand centers in the United States or globally.” Goldman Sachs⁵⁵

“Canada’s oil industry is facing a serious challenge to its long-term growth. . . . Production growth can not occur unless some of the planned pipeline projects out of [Western Canada] go ahead.” TD Economics⁵⁶

“Unless we get increased [market] access, like with Keystone XL, we’re going to be stuck ... our production is going to be the one backed out of the system.” Ralph Glass, Vice-President of AJM Petroleum Consultants⁵⁷

“[I]f they cannot [get oil sands crude to the U.S. Gulf Coast region], we believe the credit profiles of companies with a high portion of heavy crude oil in their upstream product market will deteriorate.” Standard & Poor’s⁵⁸

“Essential to diminishing hopes for an oilsands bonanza are three proposed pipelines.” Earle Gray, former editor of Oilweek⁵⁹

“The ... decision regarding Keystone XL is critical because it constitutes a vital export link for Canadian oil production in the 2015-17 timeframe. Should Keystone XL be rejected, Canadian oil sands producers will need to rethink expansion plans, timelines, and export pipeline solutions.” RBC Capital Markets⁶⁰

“The logistics are critical in the development of the oil sands. If Keystone is delayed this year, I believe the industry will not be able to keep up with the current pace of

⁵⁵ Goldman Sachs, *Getting oil out of Canada: Heavy oil diffs expected to stay wide and volatile*, at 2, 6, 11 (June 2, 2013).

⁵⁶ TD Economics, *Pipeline Expansion Is A National Priority*, at 1 (Dec. 17, 2011) (online at www.td.com/document/PDF/economics/special/ca1212_pipeline.pdf).

⁵⁷ *Without Keystone XL, oil sands face choke point*, The Globe and Mail (June 8, 2011) (online at www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/without-keystone-xl-oil-sands-face-choke-point/article598717/).

⁵⁸ *S&P fears oil sands producers’ future without proper pipelines*, EnergyWire (June 19, 2013) (online at www.eenews.net/energywire/2013/06/19/stories/1059983099).

⁵⁹ *Collapse of oilsands boom will scramble Canadian economy*, The Star (Mar. 13, 2013) (online at www.thestar.com/opinion/commentary/2013/03/13/collapse_of_oilsands_boom_will_scramble_canadian_economy.html).

⁶⁰ RBC Capital Markets, *Energy Insights: Keystone XL – Weighing the Outcomes*, at 5 (Feb. 11, 2013).

development.” André Goffart, managing director of Total Exploration and Production in Canada⁶¹

“This year ... will be pivotal. ... At stake is Canadian prosperity and security. At the extreme, which I can’t imagine happening, if we can’t build the infrastructure then the resources are stranded.” Joe Oliver, Minister for Natural Resources, Canada⁶²

“[T]he approval of the [Keystone XL] project could bring forward investments in oil sand projects which would add upside to our production forecasts.” International Energy Agency⁶³

“[W]ith [Keystone] XL in place and operating at capacity, bitumen production could increase substantially.” Canadian Energy Research Institute⁶⁴

The above statements about the importance of Keystone XL to the tar sands industry are not just words; they are backed up by actions. The oil industry, the Alberta government, and the Canadian federal government have put substantial resources into obtaining approval of Keystone XL. These include massive advertising and lobbying campaigns, and at least 15 visits by high ranking Canadian officials since November 2011.⁶⁵ Alison Redford, the Premier of the Province

⁶¹ *Faster and cheaper is watchword for Canada’s oil sands*, Financial Times (May 27, 2013) (online at www.ft.com/cms/s/0/771d7062-bef0-11e2-87ff-00144feab7de.html#axzz2UmxXtgyT).

⁶² *Id.*

⁶³ International Energy Agency, *Oil: Medium-Term Market Report 2013*, at 129 (May 2013).

⁶⁴ Canadian Energy Research Institute, *Pacific Access: Part I – Linking Oil Sands Supply to New and Existing Markets*, at 28 (July 2012) (online at www.ceri.ca/images/stories/part_i_-_impacts_of_oil_sands_production_-_final_july_2012.pdf).

⁶⁵ See, e.g., *For your radar . . . Canada brings on hired guns for Keystone*, Politico (Apr. 3, 2013) (reporting new lobbying contracts with the Alberta government worth \$200,000); *Province pushes Keystone XL pipeline with another round of U.S. Ads*, Calgary Herald (Apr. 7, 2013) (reporting \$77,000 ad campaign by the Alberta government); *Alberta places ad in New York Times to make its case for Keystone XL pipeline*, Calgary Herald (Mar. 17, 2013) (reporting \$30,000 ad and multiple visits by Canadian politicians to Washington, DC to advocate for Keystone XL); *Critics take to web as Stephen Harper visits New York to sell merits of Keystone XL*, Vancouver Sun (May 16, 2013) (reporting on visit by Prime Minister Stephen Harper to New York City to advocate for Keystone XL); *Harper government presses Obama to approve Keystone XL pipeline*, Rabble.ca (Feb. 17, 2013) (reporting two visits by Foreign Minister John Baird to Washington, D.C. to advocate for Keystone XL); *‘He’s exaggerating’: Natural resources minister dismisses oil sands criticism on U.S. pipeline road show*, National Post (Apr. 25, 2013) (reporting four visits by Natural Resources Minister Joe Oliver to the U.S. to advocate for Keystone XL); *Alison Redford Keystone XL Speech In Washington Interrupted By Protest*, Huffington Post (Apr. 9, 2013) (reporting visit by Alberta Premier Alison Redford to Washington, D.C. to advocate for Keystone XL); Government of Alberta, *Final Report: Premier*

of Alberta, has made at least seven visits to the United States in the past 19 months in which she advocated for Keystone XL.⁶⁶ The Canadian government has increased the advertising budget for the agency overseeing and promoting tar sands development, Natural Resources Canada, by 3,800% in two years, from CAD\$237,000 in 2010-2011 to CAD\$9 million in 2011-2012, to

Alison Redford's Mission to New York City and Washington, D.C., November 13-15, 2011 (online at www.international.alberta.ca/documents/International/MissionReport-Premier-NYC-DC-Nov2011.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Chicago, Illinois, February 25-29, 2012* (online at www.international.alberta.ca/documents/International/MissionReport-Premier-Chicago-Feb2012.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Washington, D.C. and New York City, March 6-9, 2012* (online at www.international.alberta.ca/documents/International/MissionReport-Premier-DC-NYC-March2012.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Cle Elum, Washington, Western Governors' Association Annual Meeting, June 9-10, 2012* (online at www.international.alberta.ca/documents/MissionReport-Premier-WGA-June2012.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Scottsdale, Arizona, Western Governors' Association Winter Meeting, December 1-2, 2012* (online at www.international.alberta.ca/documents/MissionReport-PremierDec2012Arizona.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Washington, D.C., National Governors' Association Winter Meeting, February 22-24, 2013* (online at www.international.alberta.ca/documents/PremierMissionWashington-February2013.pdf); Government of Alberta, *Final Report: MLA Mel Knight's Mission to Washington, D.C., Pacific NorthWest Economic Region (PNWER) Arctic Caucus Roundtable, Energy Council 2012 Federal Energy and Environmental Matters Conference, March 7-11, 2012* (online at www.international.alberta.ca/documents/International/MissionReport-Knight-DC-March2012.pdf); Government of Alberta, *Final Report: Minister Cal Dallas' Mission to Washington, D.C., Canadian American Business Council (CABC) Spring Forum, June 6-7, 2012* (online at www.international.alberta.ca/documents/International/MissionReport-Washington-June2012.pdf).

⁶⁶ *Alison Redford Keystone XL Speech In Washington Interrupted By Protest*, Huffington Post (Apr. 9, 2013) (reporting visit by Alberta Premier Alison Redford to Washington, D.C. to advocate for Keystone XL); Government of Alberta, *Final Report: Premier Alison Redford's Mission to New York City and Washington, D.C., November 13-15, 2011* (online at www.international.alberta.ca/documents/International/MissionReport-Premier-NYC-DC-Nov2011.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Chicago, Illinois, February 25-29, 2012* (online at www.international.alberta.ca/documents/International/MissionReport-Premier-Chicago-Feb2012.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Washington, D.C. and New York City, March 6-9, 2012* (online at www.international.alberta.ca/documents/International/MissionReport-Premier-DC-NYC-March2012.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Cle Elum, Washington, Western Governors' Association Annual Meeting, June 9-10, 2012* (online at www.international.alberta.ca/documents/MissionReport-Premier-WGA-June2012.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Scottsdale, Arizona, Western Governors' Association Winter Meeting, December 1-2, 2012* (online at www.international.alberta.ca/documents/MissionReportPremierDec2012Arizona.pdf); Government of Alberta, *Final Report: Premier Alison Redford's Mission to Washington, D.C., National Governors' Association Winter Meeting, February 22-24, 2013* (online at www.international.alberta.ca/documents/PremierMissionWashington-February2013.pdf).

CAD\$16.5 million in 2012-2013, for advertising both to domestic and U.S. audiences.⁶⁷ While dollar totals are not available, oil industry interests appear to have spent vastly more on advertisements urging approval of Keystone XL, judging by the number and placement of television, radio, print, and web advertisements over the past few years. A recent analysis found that the combined lobbying budget of the 50 plus oil companies, trade associations, and others that lobbied in support of Keystone XL in 2012 was over \$178 million.⁶⁸

Tar sands promoters clearly believe that Keystone XL is critically important to the prospects for tar sands development. Their words and actions provide no support for the idea that alternatives, such as rail, are almost equally attractive and would allow tar sands to expand at the same rate and to the same extent with or without Keystone XL. The State Department must acknowledge that it has no crystal ball to predict the future. At minimum, the draft SEIS should recognize that the experts cited here might, in fact, be correct that denial of Keystone XL would have a significant effect on tar sands expansion. The failure to seriously evaluate such a scenario is a fatal flaw in the draft SEIS evaluation of potential impacts of Keystone XL on climate change.

II. Increased U.S. Greenhouse Gas Emissions from Keystone XL are Significant

In addition to the pipeline's effect on tar sands expansion in Canada, there is no dispute that the tar sands oil delivered by Keystone XL will increase U.S. greenhouse gas emissions by displacing lower carbon polluting crude (measured on a lifecycle basis) with crude from the carbon-intensive tar sands. The State Department estimates that substituting tar sands crude for the average crudes refined in the United State would increase U.S. carbon pollution by 18.7 MMTCO₂e (million metric tons of CO₂-equivalent) per year.⁶⁹ As the State Department recognizes, this number does not account for additional emissions from the use of co-products besides gasoline and diesel produced from tar sands crude, such as petroleum coke.⁷⁰ Adjusting

⁶⁷ *Ottawa ramps up ad spending for U.S. pipeline fight*, CBC News (May 14, 2013) (online at www.cbc.ca/news/politics/story/2013/05/14/pol-resource-development-ads.html).

⁶⁸ See, e.g., *Supporters of Keystone XL Outspend Opponents 35 to 1*, Climate Progress (Feb. 20, 2013) (online at <http://thinkprogress.org/climate/2013/02/20/1614831/lobbying-budgets-of-keystone-xl-opponents-exceeded-that-of-supporters-by-more-than-35-to-1/>). For some entities listed, lobbying on Keystone XL likely represented a small portion of their total lobbying budgets, but others such as the American Petroleum Institute (\$5,170,000 total), the American Fuel and Petrochemical Manufacturers (\$3,714,241 total), Devon Energy Production Company (\$1,100,000 total), Exxon Mobil (\$12,970,000) and TransCanada Pipelines (\$850,000 total) likely spent substantial portions of their lobbying budgets on Keystone XL.

⁶⁹ U.S. Department of State, *Draft SEIS*, at 4.15-105 (based on the average slate of crude refined in the United States in 2005).

⁷⁰ *Id.* at 4.15-105 to 4.15-106; see also, e.g., *Canadian Utility Finds a Use for Detroit's Pile of Oil Sands Byproduct*, New York Times (June 6, 2013) (online at www.nytimes.com/2013/06/07/business/huge-

the estimate to include emissions from those products, as EPA emphasized in its comments, raises the estimate of incremental carbon pollution from a shift to tar sands crude by 30%, to 24.3 MMTCO₂e each year.⁷¹

Either estimate represents a significant increase in U.S. carbon pollution, which is a big step in the wrong direction. In his recent speech on climate change, President Obama reiterated his commitment to lowering U.S. greenhouse gas emissions to 17% below the year 2005 level by 2020, and this is only a first step toward the much larger emissions reductions that are necessary to reduce the chances of catastrophic climate change. Meeting the President's commitment will require a large and sustained effort across many sources of emissions, even without Keystone XL.⁷² Adding a large pool of extra carbon pollution from the tar sands will make the job that much more difficult and put additional pressure on other U.S. emitters. Carbon pollution is a zero sum game – if we allow increased emissions in one area, we must make even greater reductions elsewhere.

Adding 24.3 MMTCO₂e of carbon pollution is equivalent to increasing U.S. oil consumption by 55.8 million barrels per year.⁷³ These emissions are also equivalent to the annual emissions of seven coal-fired power plants.⁷⁴ This is larger than the annual carbon pollution from the electricity generation in 18 states.⁷⁵ The additional annual carbon pollution from tar sands products from the Keystone XL pipeline is also equivalent to the annual carbon pollution from generating electricity for 3.6 million single-family homes.⁷⁶ That is more single-family homes than exist in most U.S. states.⁷⁷ Another way to evaluate the significance of this

petroleum-coke-pile-making-way-back-to-canada.html?hpw&_r=2&) (reporting the substitution of inexpensive pet coke for natural gas at a Canadian electric power plant).

⁷¹ *Id.*; U.S. Environmental Protection Agency, *Comments on Draft SEIS*, at 2.

⁷² See, e.g., World Resources Institute, *Can the U.S. Get There from Here? Using Existing Federal Laws and State Action to Reduce Greenhouse Gas Emissions* (Feb. 2013) (online at www.wri.org/publication/can-us-get-there-from-here) (finding that to reduce U.S. emissions 17% below 2005 levels in 2020 will require the federal government to apply the most ambitious suite of policies evaluated).

⁷³ U.S. Environmental Protection Agency, *Greenhouse Gas Equivalencies Calculator* (online at www.epa.gov/cleanenergy/energy-resources/calculator.html).

⁷⁴ *Id.*

⁷⁵ U.S. Energy Information Administration, *State Historical Tables for 1990-2011 on emissions per type of producer and per energy source* (online at www.eia.gov/electricity/data/state/emission_annual.xls).

⁷⁶ U.S. Environmental Protection Agency, *Greenhouse Gas Equivalencies Calculator* (online at www.epa.gov/cleanenergy/energy-resources/calculator.html).

⁷⁷ U.S. Census Bureau, *Statistical Abstract of the United States: 2012*, at Table 985 (online at www.census.gov/compendia/statab/2012/tables/12s0985.pdf).

pollution increase is in terms of the additional forest land that would be required to offset those additional emissions. Offsetting the extra annual emissions from the shift to tar sands products from Keystone XL would require adding 19.7 million acres of new forest in the United States, which would cover an area the size of West Virginia.⁷⁸

Another measure of significance is the cost that this additional quantity of carbon pollution is expected to impose on society. In its comments on the draft SEIS EPA recommended that the State Department use monetized estimates of the social cost of carbon to help put the climate implications of the Keystone XL pipeline in context. Keystone XL would produce an estimated 1215 MMTCO₂e of carbon pollution over the next fifty years, which is likely the minimum lifespan of the pipeline. The Administration estimates that the social cost of carbon rises from \$38 per MTCO₂e (metric tons of CO₂-equivalent) in 2015 to \$71 per MTCO₂e in 2050.⁷⁹ Thus, based on the Administration's estimates, over the project's minimum lifespan, the additional carbon pollution from Keystone XL will impose an estimated \$71 billion in costs.⁸⁰

Additionally, Keystone XL is one of several recent proposals for pipelines and pipeline expansions to bring tar sands crude into the United States. When these projects are considered on a cumulative basis, the increase in U.S. carbon pollution is even more dramatic. Already, the first Keystone tar sands pipeline and the Alberta Clipper pipeline have increased U.S. emissions of carbon pollution by an estimated 31 MMTCO₂e per year, compared to the lifecycle emissions from the average barrel of oil displaced by tar sands crude.⁸¹ Another proposal would expand the Alberta Clipper tar sands pipeline by 350,000 barrels per day, adding an additional 10.4

⁷⁸ U.S. Environmental Protection Agency, *Greenhouse Gas Equivalencies Calculator in Calculations and References* (online at www.epa.gov/cleanenergy/energy-resources/refs.html).

⁷⁹ Interagency Working Group on Social Cost of Carbon, U.S. Government, *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (May, 2013) (online at www.whitehouse.gov/sites/default/files/omb/inforeg/social_cost_of_carbon_for_ria_2013_update.pdf) (all dollar amounts in 2007\$).

⁸⁰ This calculation holds the cost constant at \$71/MTCO₂e beyond 2050.

⁸¹ TransCanada, *Oil* (2013) (online at www.transcanada.com/100.html) (capacity of Keystone pipeline is 590,000 barrels per day); Enbridge, *Mainline Enhancement Program: Canada* (2012) (online at www.enbridge.com/MainlineEnhancementProgram/Canada.aspx) (capacity of Alberta Clipper is 450,000 barrels per day). These calculations multiply the barrels per day capacity of the pipeline by the State Department's estimate that substituting tar sands crude for the U.S. average crude produces 2.3 MMTCO₂e per year per 100,000 barrels displaced, based on a study by the National Energy Technology Laboratory. U.S. Department of State, *Draft SEIS*, at 4.15-104. The estimates in this paragraph include emissions from the use of co-products from tar sands. See U.S. Department of State, *Draft SEIS*, at 4.15-105 to 4.15-106.

MMTCO₂e per year of carbon pollution.⁸² Considered on a cumulative basis with Keystone XL, these tar sands pipelines would produce a substantial worsening of U.S. carbon pollution of 66 MMTCO₂e per year.

Finally, if the climate change effects of the Keystone XL pipeline are not considered to be significant, it is unclear whether there is any individual project in the United States that would ever be considered significant. Because carbon pollution comes from a multiplicity of sources, any one source of carbon pollution is necessarily quite a small proportion of the total. In fact, Keystone XL is quite a large source of carbon pollution when compared to other proposed projects in the United States today. Discounting the emissions from an individual project on the grounds that they are small compared to the total quantity of greenhouse gas emissions would guarantee that we never take meaningful action on proposed new sources of carbon pollution.

III. Additional Concerns

In addition to our concerns about the effects of the Keystone XL pipeline on carbon pollution, we also have concerns about other weaknesses in the draft SEIS. For example, Keystone XL poses real risks of oil spills and it passes through particularly sensitive areas, including areas overlaying the Ogallala Aquifer. There is substantial real-world evidence that tar sands bitumen is more difficult to clean up than conventional crude oil, and the recent track record of TransCanada and other pipeline companies does not inspire confidence regarding their ability to prevent spills. These concerns were raised in substantial detail in other comments, particularly from individuals and communities along the pipeline route. We urge the State Department to carefully consider those comments and address them in the final SEIS.

We request the State Department to acknowledge that the Keystone XL tar sands pipeline would have significant consequences for climate change. The harm from climate change is mounting, and the need to act becomes ever more urgent. Given the multiplicity of sources of greenhouse gases and the size of reductions needed from current levels, stopping a single project alone could never be sufficient to avoid a dangerous degree of climate change. Yet in the absence of comprehensive economy-wide action, there is no choice but to combat climate change on a project-by-project basis. The alternative is business-as-usual rising carbon pollution that would doom us to devastating climate disruption.

We strongly urge the State Department to address these concerns in the final SEIS by conducting a thorough and meaningful analysis of how approval of the Keystone XL tar sands pipeline could affect emissions of carbon pollution and the threat of climate change.

⁸² *Id.*; Enbridge, *Line 67 Upgrade Project – Phase 2* (2012) (online at www.enbridge.com/MainlineEnhancementProgram/US/Line67UpgradeProjectPhase2.aspx).

The Honorable Kerri-Ann Jones, Ph.D.
July 10, 2013
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Sincerely,

A handwritten signature in blue ink, appearing to read "Henry A. Waxman".

Rep. Henry A. Waxman
Ranking Member
House Committee on Energy and Commerce

A handwritten signature in blue ink, appearing to read "Sheldon Whitehouse".

Sen. Sheldon Whitehouse
Chairman
Subcommittee on Oversight
Senate Committee on Environment and
Public Works

cc: The Honorable John Kerry
Secretary
U.S. Department of State